

## REMARKS

This application has been reviewed in light of the Office Action dated April 15, 2003. Claims 1-31 remain pending in this application, and have been amended to even further clarify the claimed subject matter. Claims 1 and 9 are the independent claims. Favorable reconsideration is requested.

Claim 19 was rejected for the reason set forth on page 2 of the Office Action. That claim has been amended as deemed necessary to overcome this objection. Accordingly, withdrawal of the objection is respectfully requested.

Claims 1, 4, 5, 9, 12, 13, 17-25 and 27-30 were rejected under 35 U.S.C. 102(b) as anticipated by U.S. Patent No. 5,872,541 (Yoshioka et al.). Claims 2, 3, 10, and 11 were rejected under 35 U.S.C. 103(a) as being unpatentable over *Yoshioka et al.* in view of U.S. Patent No. 5,598,052 (Khan et al.).

Without conceding the propriety of these rejections, independent Claims 1 and 9 have been amended to recite a substrate structure that is a precursor to an electron source. For example, as amended, independent Claims 1 and 9 recite, respectively:

“1. A substrate structure which is a precursor to an electron source, and on which an electron-emitting device of the electron source is to be disposed, comprising:  
a substrate; and  
an insulating material film provided on said substrate,  
wherein said insulating material film comprises a plurality of metallic oxide particles having an average particle size within a range of 6 nm to 60 nm as expressed in a median value.”

“9. A substrate structure which is a precursor to an electron source, and on which an electron-emitting device of the electron source is to be disposed, comprising:  
a substrate; and  
an SiO<sub>2</sub> film provided on said substrate,  
wherein said SiO<sub>2</sub> film comprises a plurality of metallic oxide particles having an average particle size within a range of 6 nm to 60 nm as expressed in a median value.”

The Office Action relies on Fig. 11(5) of Yoshioka et al. to reject Claims 1 and 9. That Figure of Yoshioka et al. shows that both an insulating material film 11 and metallic oxide particles 9 are members constituting an electron-emitting device (see, e.g., col. 12, lines 14-20 and Claims 37 and 46). While the elements 11 and 9 form an electron-emitting element itself, they do not form part of a precursor to an electron source as in the present invention. Indeed, nothing in Yoshioka et al. would teach or suggest a substrate structure which is a *precursor* to an electron source, and on which an electron-emitting device of the electron source is to be disposed, as recited in Claim 1, wherein the precursor comprises a substrate and an insulating material film having features as recited in Claim 1, provided on the substrate structure. As such, Claim 1 is deemed clearly patentable over Yoshioka et al.

Moreover, for substantially the reasons as those set forth above, neither would anything in Yoshioka et al. teach or suggest a substrate structure which is a *precursor* to an electron source, and on which an electron-emitting device of the electron source is to be disposed, as recited in Claim 9, wherein the substrate structure comprises a substrate and an SiO<sub>2</sub> film having features as recited in Claim 9. Accordingly, Claim 9 is believed clearly patentable over Yoshioka et al.

A review of the other art of record has failed to reveal anything that, in Applicants' view, would remedy the deficiencies of the art discussed above, as applied against the independent claims herein. Therefore, those claims are respectfully submitted to be patentable over the art of record.

The other claims in this application depend from one or another of the independent claims discussed above, and, therefore, are submitted to be patentable for at

least the same reasons as are those independent claims. Since each dependent claim is also deemed to define an additional aspect of the invention, individual reconsideration of the patentability of each claim on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration and the allowance of the present application.

No petition to extend the time for response to the Office Action is deemed necessary for the present Amendment. If, however, such a petition is required to make this Amendment timely filed, then this paper should be considered such a petition and the Commissioner is authorized to charge the requisite petition fee to Deposit Account 06-1205.

Applicants' undersigned attorney may be reached in our New York Office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address listed below.

Respectfully submitted,

  
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